

Trigonometric Graphs Summary

Functions	One Cycle of the Graph	Domain	Range	Amplitude	Period
$y = \sin x$		all real numbers	$-1 \leq y \leq 1$	1	2π
$y = \cos x$		all real numbers	$-1 \leq y \leq 1$	1	2π
$y = \tan x$		all real numbers except $x = \frac{\pi}{2} + k\pi$ where k is an integer	all real numbers	none	π
$y = \cot x$		all real numbers except $x = k\pi$ where k is an integer	all real numbers	none	π
$y = \sec x$		all real numbers except $x = \frac{\pi}{2} + k\pi$ where k is an integer	$y \leq -1$ or $y \geq 1$	none	2π
$y = \csc x$		all real numbers except $x = k\pi$ where k is an integer	$y \leq -1$ or $y \geq 1$	none	2π